



CALIFORNIA ENERGY COMMISSION

2015-2016 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program

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Emerging Fuels and Technologies Office
Fuels and Transportation Division

Advisory Committee Meeting and Public Workshop
San Joaquin Valley APCD – Central Region Office
Fresno, CA
February 12, 2015



About the Investment Plan Update

- Updated annually
- Guides allocations for next FY's funding
- \$100 million funding allocation
- Funding allocations for categories (not specific projects)
- Developed with input from Advisory Committee and public comment

California Energy Commission
REVISED STAFF REPORT

2015-2016 INVESTMENT PLAN
UPDATE FOR THE ALTERNATIVE
AND RENEWABLE FUEL AND
VEHICLE TECHNOLOGY PROGRAM



CALIFORNIA
ENERGY COMMISSION
Edmund G. Brown Jr., Governor

JANUARY 2015
CEC-600-2014-009-SD-REV



15/16 IP Schedule

Activity	Date
Release Staff Draft	November 5, 2014
First Advisory Committee Meeting	November 12, 2014
Release Revised Staff Draft	January 9, 2015
Second Advisory Committee Meeting	February 12, 2015
Release Lead Commissioner Report	March 2015
Business Meeting Approval	April 2015



Revised Staff Report

- Distributed to Legislative committees ahead of January 10 deadline
- Provides updates to context of 15/16 IP
- Responds to numerous stakeholder suggestions and comments
- Proposes no changes to initial allocations' scope or funding levels



Updates to Context of 15/16 IP

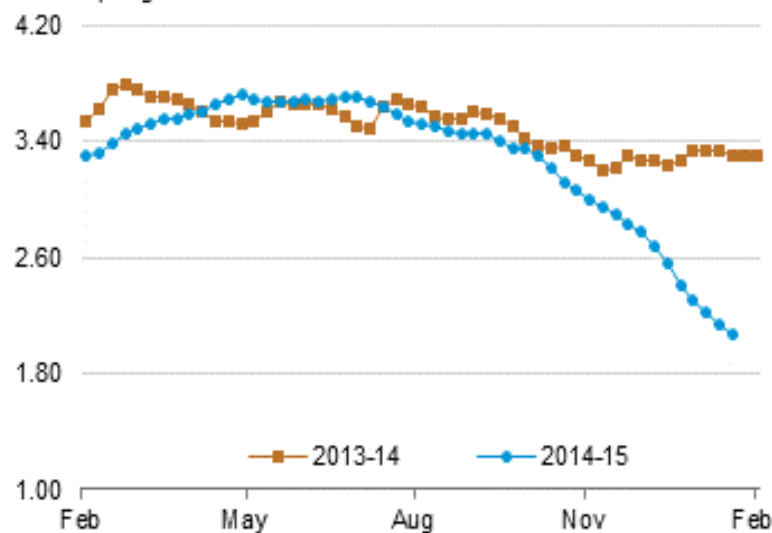
- Falling petroleum prices
- ARB funding proposals
- CPUC rulemaking decision



Falling Petroleum Prices

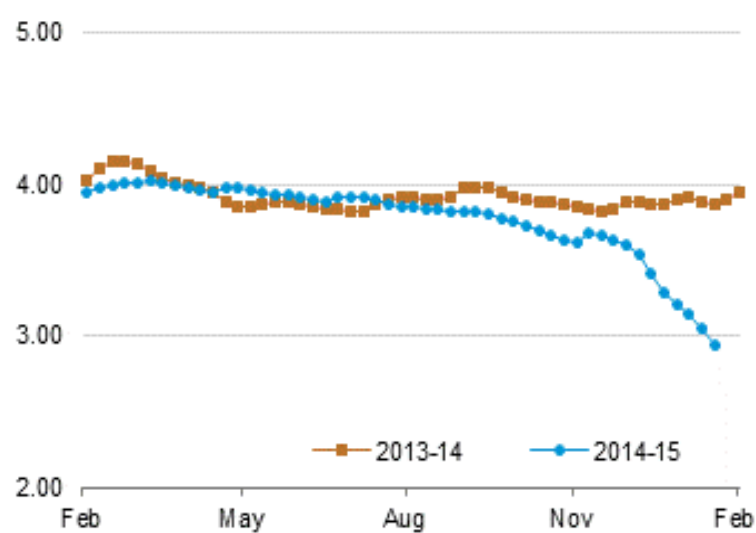
Retail prices (*dollars per gallon*)

U.S. regular gasoline prices
dollars per gallon



Retail prices (*dollars per gallon*)

U.S. on-highway diesel fuel prices
dollars per gallon



Source: U.S. Energy Information Administration, *This Week in Petroleum*, January 22, 2015.



2015-2016 ARB Funding Plan

- \$200 million available for Low Carbon Transportation; \$22 million from Air Quality Improvement Fund
- ARB staff recommend similar funding as approved for FY 2014-2015
- Workgroup meetings in February-March
- Proposed Funding Plan in May 2015



2015-2016 ARB Funding Plan

ARB Staff's Draft Proposed Funding Recommendations

Category	AQIP (millions)	LCT* (millions)
Light-Duty Vehicle Projects = \$125M		
• CVRP	\$5	\$111
• Pilot Projects to Benefit Disadvantaged Communities		\$9
Heavy-Duty Vehicle and Equipment Projects = \$98M		
• HVIP	\$5	
• Truck Loan Program	\$10	
• Low NOx Trucks Certified to Optional Standards (<i>new</i>)	\$2-3	
• California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program Projects to be identified consistent with provisions of SB 1204		\$80
Total	\$23	\$200*

*At least 50% of Low Carbon Transportation funds will benefit disadvantaged communities.



CPUC Rulemaking Decision

- Previously: General prohibition on utilities owning charging stations
- New policy: CPUC can approve utilities' ownership on case-by-case basis
 - Next 4-5 years: SDG&E applying to deploy 5,500 stations; SCE 30,000; PG&E 25,000
- Continuing to track CPUC proceedings



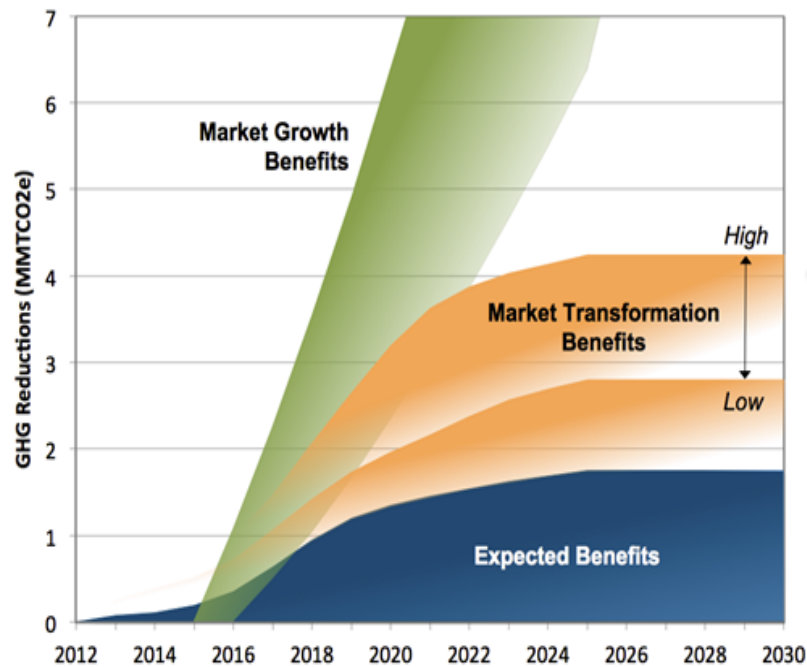
Revised Staff Report Changes

- General Changes
 - Added a summary of alternative funding and financing mechanisms
 - Updated summaries of previous awards
 - Updated NREL estimates of expected ARFVTP benefits

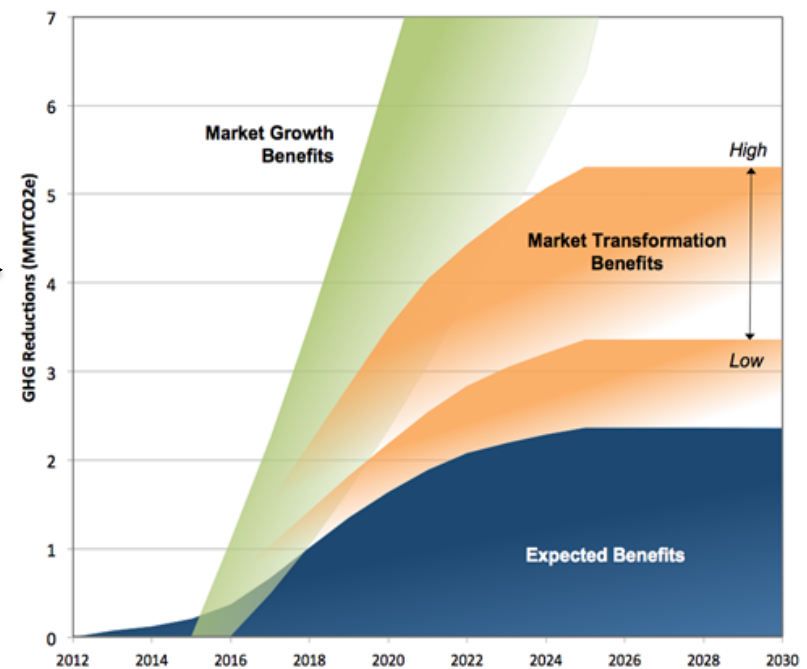


Revised Staff Report Changes

June 2014 Version



January 2015 Revision



Source: National Renewable Energy Laboratory



Revised Staff Report Changes

- Biofuel Production and Supply (\$20M)
 - Added references to illustrative scenario for 2020 LCFS compliance
 - Clarified DME eligibility
 - Updated information on ARB's proposed alternative diesel fuel regulation
 - Expanded information on biomethane feedstock availability and CalRecycle's recent grants



Revised Staff Report Changes

- Charging Infrastructure (\$18M)
 - Updated information on CPUC rulemaking
 - Encouraged feedback on how to reach disadvantaged and underserved communities
- Hydrogen Refueling Stations (\$20M)
 - Revised cumulative station count (Table 15)
 - Introduced joint CEC-ARB report on hydrogen refueling network progress, due by end of 2015



Revised Staff Report Changes

- Natural Gas Infrastructure (\$5M)
 - No changes
- Natural Gas Vehicles (\$10M)
 - Reiterated potential biomethane role in ARB's illustrative 2020 LCFS compliance scenario
 - Updated (but still awaiting more) information on methane leakage studies



Revised Staff Report Changes

- Medium- and Heavy-Duty Advanced Vehicle Technology Demonstration and Scale-Up (\$20M)
 - Expanded consideration of non-propulsion technologies
 - Open to projects seeking funds for demonstration, scale-up/manufacturing, or both



Revised Staff Report Changes

- Regional Readiness
 - Updated results from recent solicitation
- Emerging Opportunities (\$4M)
 - No changes
- Workforce Training and Development (\$3M)
 - No changes



CALIFORNIA ENERGY COMMISSION

Proposed Funding Allocations

Category	Funded Activity	Proposed Funding Allocation
Alternative Fuel Production	Biofuel Production and Supply	\$20 Million
Alternative Fuel Infrastructure	Electric Charging Infrastructure	\$18 Million
	Hydrogen Refueling Infrastructure	\$20 Million
	Natural Gas Fueling Infrastructure	\$5 Million
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Incentives	\$10 Million
	Medium- and Heavy-Duty Advanced Vehicle Technology Demonstration and Scale-Up	\$20 Million
Related Needs and Opportunities	Manufacturing	
	Emerging Opportunities	\$4 Million
	Workforce Training and Development	\$3 Million
	Total Available	\$100 Million



Next Steps

- Seek feedback from all stakeholders
 - Comments requested by February 19
 - To: docket@energy.ca.gov
 - Subject: 14-ALT-01
 - Cc: charles.smith@energy.ca.gov
- Develop Lead Commissioner Report



Next Steps

- Mid-March
 - Release Lead Commissioner Report
- April 9
 - Approval of 15/16 IP at Commission Business Meeting
- May 15
 - Deadline for sending 15/16 IP to Legislature



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Alternative Fuel Production	Biofuel Production and Supply	\$20 Million
Alternative Fuel Infrastructure	Electric Charging Infrastructure	\$18 Million
	Hydrogen Refueling Infrastructure	\$20 Million
	Natural Gas Fueling Infrastructure	\$5 Million
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Incentives	\$10 Million
	Medium- and Heavy-Duty Advanced Vehicle Technology Demonstration and Scale-Up	\$20 Million
Related Needs and Opportunities	Manufacturing	
	Emerging Opportunities	\$4 Million
	Workforce Training and Development	\$3 Million
	Total Available	\$100 Million